

AMENDMENTS TO THE CLAIMS

Please amend Claim 1 and add new Claims 4-10 as follows:

1. (CURRENTLY AMENDED) An insert for use in the shell of a ball and seat valve finding application in a reciprocating downhole pump, comprising:
a cylindrical tubular body forming a through-bore and having vertically spaced apart top and bottom rings joined by circumferentially spaced apart ribs,
5 the rings and ribs combining to form side openings;
the ribs supporting inwardly protruding flanges having upper inner ends arching together toward the longitudinal axis of the body, the flanges each thinning upwardly and inwardly and having curved bottom surfaces; and
an upwardly directed, elongate reinforcing member connected with the
10 flanges at their upper inner ends, the reinforcing member and flanges protruding above the ~~upper~~ top ring;
the curved bottom surfaces of the flanges and the reinforcing member combining to form a semi-spherical ball stop located beneath an upper edge of the top ring.
2. (ORIGINAL) The insert as set forth in claim 1 wherein:
the ribs are inclined and shaped to form helically configured side openings; and
the flanges are helically directed.
3. (ORIGINAL) The insert as set forth in claim 2 wherein:
the flanges correspond at their bases with the shaping of the ribs.
4. (NEW) An insert for use in the shell of a ball and seat valve finding application in a reciprocating downhole pump, comprising:
a cylindrical tubular body forming a through-bore and having vertically spaced apart top and bottom rings joined by circumferentially spaced apart,

- 5 inclined ribs, the rings and ribs combining to form helically configured side openings;
the ribs supporting inwardly protruding, helically directed flanges having upper inner ends arching together toward the longitudinal axis of the body, the flanges having curved bottom surfaces; and
- 10 an upwardly directed, elongate reinforcing member connected with the flanges at their upper inner ends, the reinforcing member and flanges protruding above the top ring;
the curved bottom surfaces of the flanges and the base of the reinforcing member combining to form a semi-spherical ball stop located beneath an upper
- 15 edge of the top ring.

5. (NEW) The insert as set forth in claim 4 wherein:

the flanges each thin upwardly and inwardly along their inner ends.

6. (NEW) The insert as set forth in claim 1 wherein there are three ribs supporting three flanges.

7. (NEW) The insert as set forth in claim 2 wherein there are three ribs supporting three flanges.

8. (NEW) The insert as set forth in claim 3 wherein there are three ribs supporting three flanges.

9. (NEW) The insert as set forth in claim 4 wherein there are three ribs supporting three flanges.

10. (NEW) The insert as set forth in claim 5 wherein there are three ribs supporting three flanges.